

What is claimed is:

1. A flat display apparatus having a flat display panel, comprising:

5 a protective sheet attached to a display screen surface of
the flat display panel.

2. A flat display apparatus according to claim 1, wherein said
protective sheet is an optical filter formed by laminating an ambient
light antireflective layer, an infrared-radiation absorbing and
10 color-tone correcting layer and an electromagnetic-wave blocking
layer, and said optical filter is attached to the flat display panel
by means of a transparent adhesive material.

15 3. A flat display apparatus according to claim 2, wherein said
transparent adhesive material is one of an acrylic type adhesive
material and a silicon type adhesive material.

20 4. A flat display apparatus according to claim 2, wherein said
transparent adhesive material has a refractive index approximately
equal to a refractive index of a glass substrate forming part of
the flat display panel.

25 5. A flat display apparatus according to claim 4, wherein the
refractive index of said transparent adhesive material ranges from
1.4 to 1.6.

6. A flat display apparatus according to claim 2, wherein said

transparent adhesive material has an adhesive strength capable of allowing the transparent adhesive material to be peeled away.

7. A flat display apparatus according to claim 2, wherein the
5 thickness of said optical filter attached to the flat display panel,
together with the thickness of said transparent adhesive material
is equal to or more than 0.5 mm.

8. A flat display apparatus according to claim 2, wherein said
10 optical filter is formed by laminating, in order, the
electromagnetic-wave blocking layer, the infrared-radiation
absorbing and color-tone correcting layer and the ambient light
antireflective layer, and is attached to the display screen surface
of the flat display panel with the electromagnetic-wave blocking
15 layer facing the flat display panel.

9. A flat display apparatus according to claim 8, wherein the
electromagnetic-wave blocking layer has an outer end portion exposed
by projecting beyond the infrared-radiation absorbing and color-tone
20 correcting layer and the ambient light antireflective layer which
are formed on the electromagnetic-wave blocking layer, and the
exposed portion of the electromagnetic-wave blocking layer forms
an earth connecting part.

25 10. A flat display apparatus according to claim 9, wherein the
electromagnetic-wave blocking layer is designed to have an area
larger than an area of the infrared-radiation absorbing and

color-tone correcting layer and the ambient light antireflective layer so that the outer end portions of the electromagnetic-wave blocking layer are exposed.

- 5 11. A flat display apparatus according to claim 9, wherein recesses are formed in outer end portions of the infrared-radiation absorbing and color-tone correcting layer and the ambient-light antireflective layer, and the electromagnetic-wave blocking layer is exposed inside the recesses when being laminated.

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12. A flat display apparatus according to claim 9, wherein a black-colored coating is formed on a surface of the electromagnetic-wave blocking layer of said optical filter.

- 15 13. A flat display apparatus according to claim 12, wherein the black-colored coating is one of a black-colored metallic film and a blacking-treated coating.

- 20 14. A flat display apparatus according to claim 12, wherein the earth connecting part is covered with a black-colored coating, and the earth connecting part occupies a non-display area corresponding to an outer end portion of the flat display panel.

- 25 15. A flat display apparatus according to claim 12, wherein registration marks are formed on the black-colored coating covering the earth connecting part.

16. A flat display apparatus according to claim 1, further comprising a chassis member for supporting the flat display panel, wherein the flat display panel is mounted on the chassis member with interposition of a foam material.

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17. A flat display apparatus according to claim 16, wherein the hardness of the foam material is equal to or less than 30 degrees.

18. A flat display apparatus according to claim 16, further
10 comprising a side frame member for clamping the flat display panel between itself and the chassis member to maintain the flat display panel in a mounted position.

19. A flat display apparatus according to claim 18, wherein the
15 side frame member clamps the flat display panel between itself and the chassis member by pressing against the earth connecting part, formed on the outer end portion of the flat display panel, with interposition of one of a conductive gasket and a spring member.

20. A flat display apparatus according to claim 2, wherein a
difference between a refractive index of said transparent adhesive
material and one of a refractive index of a substrate of the flat
display panel having said transparent adhesive material attached
thereto and a refractive index of said protective sheet is equal
25 to or less than 0.2.

21. A flat display apparatus according to claim 20, wherein the

flat display panel is a plasma display panel, and a discharge, except a display discharge, generated in the plasma display panel provides a luminance of equal to or less than 1cdm^2 .